

Pattern

Training

Training Image

10/705,454 Fast High-Accuracy Multi-Dimensional Pattern Inspection Silver Sheet 1 of 29 Evaluated Field Dipole List coverage rms error clutterEvaluated Image Dipole List POSE -137 - 140 Run-time Figure 1 -132 Run-time Image START POSE-CLIENT MAP

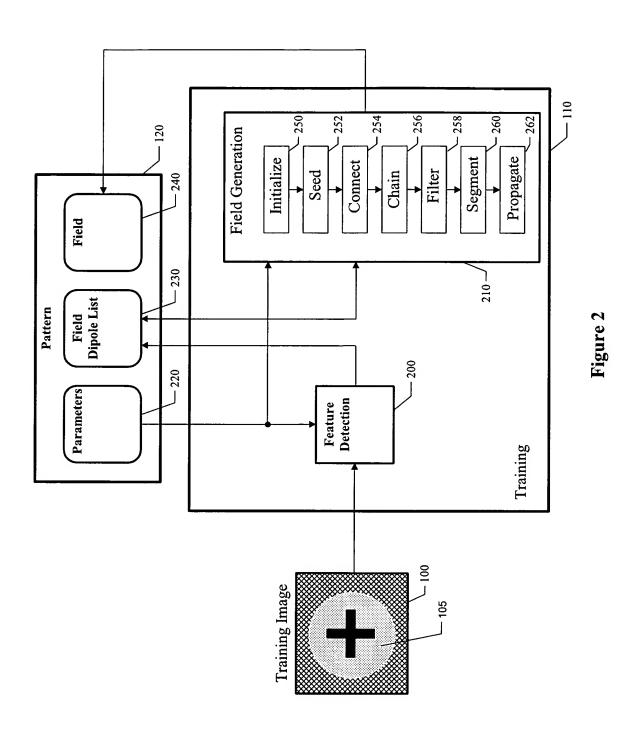
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Figure 1A

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Fast High-Accuracy MultiDimensional Pattern Inspection
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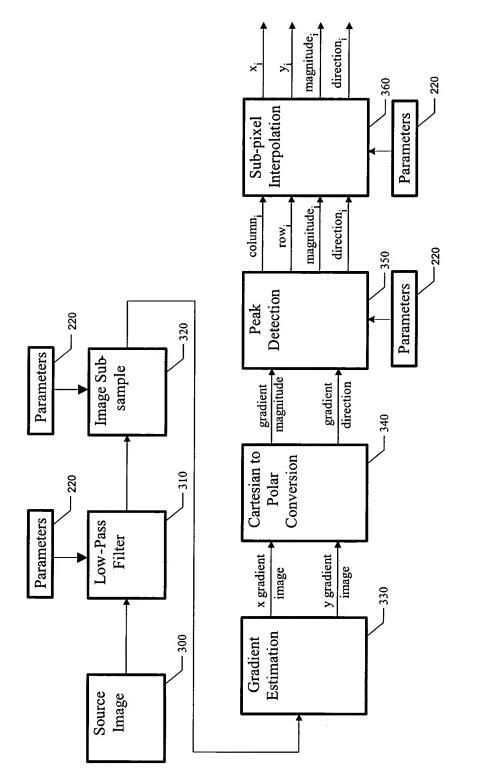


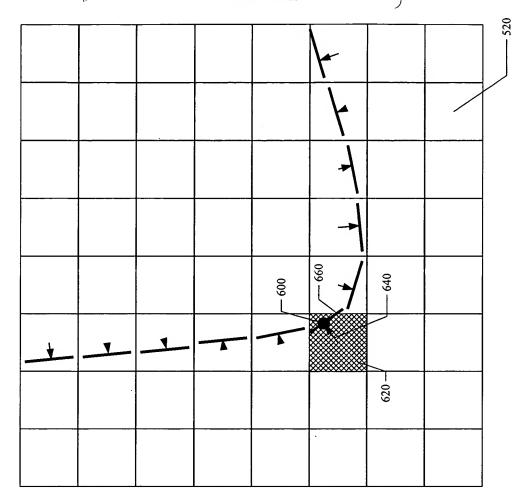
Figure 3

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Fast High-Accuracy MultiDimensional Pattern Inspection Silver Sheet 5 of 29 nearest field dipole 401 consider polarity ignore polarity gradient direction - 420 - 460 polarity 12 not corner 12 11 corner is corner 7 450 **- 430** flags 4 15 eval code <u>1</u>0 7 440 force magnitude evaluate only expect blank don't care attract 8

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Figure 4

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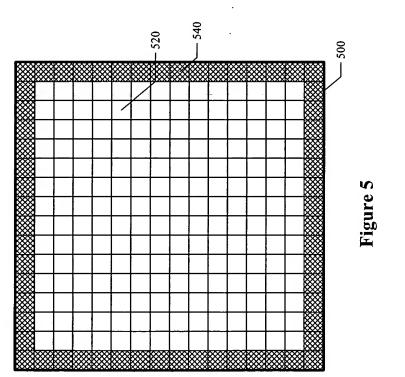
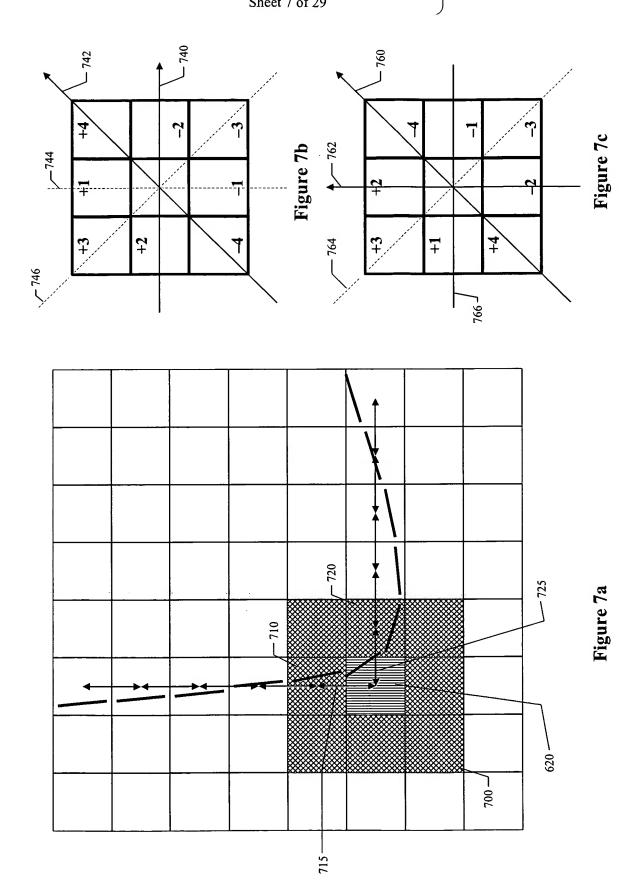


Figure 6

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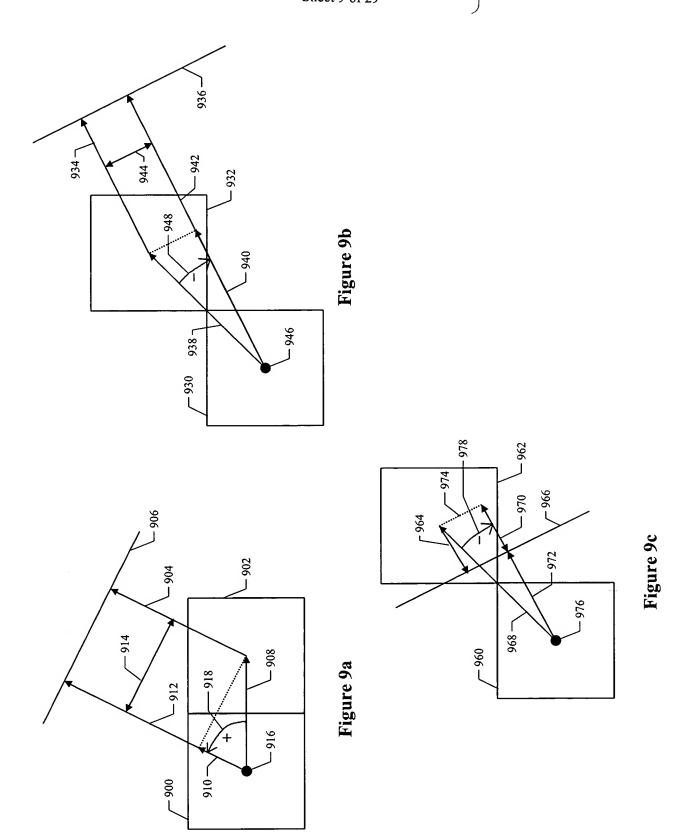
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	- 820		1/	008 —	

Figure 8

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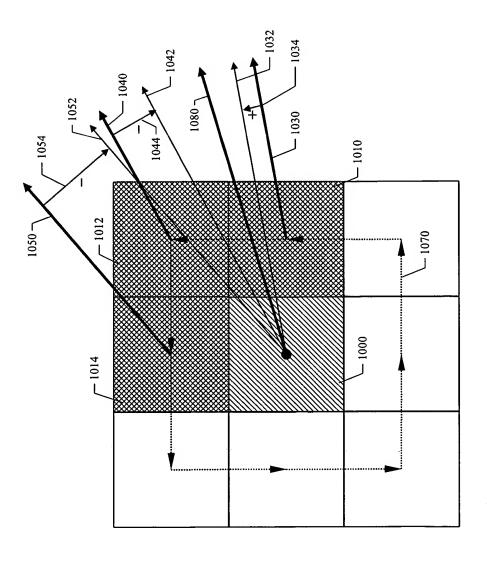


Figure 10

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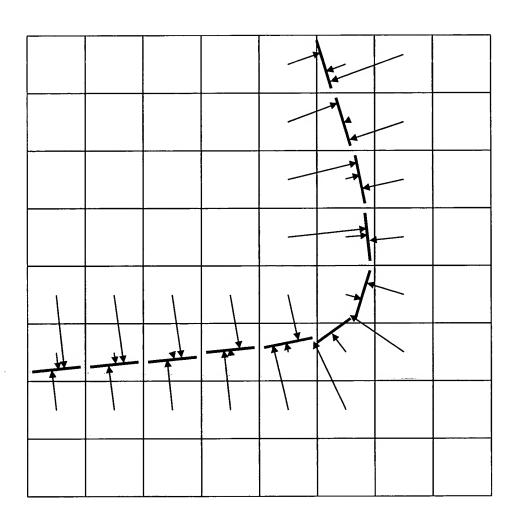
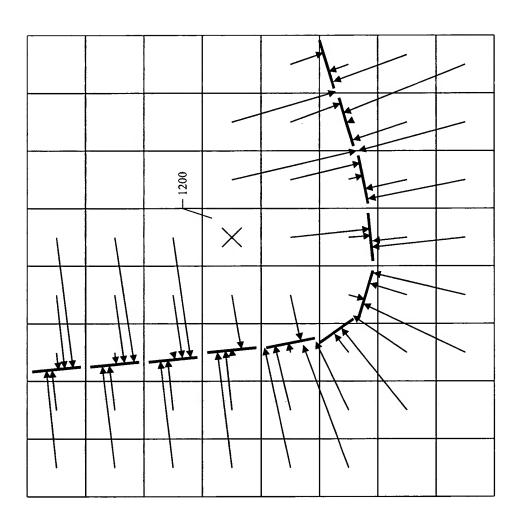


Figure 11





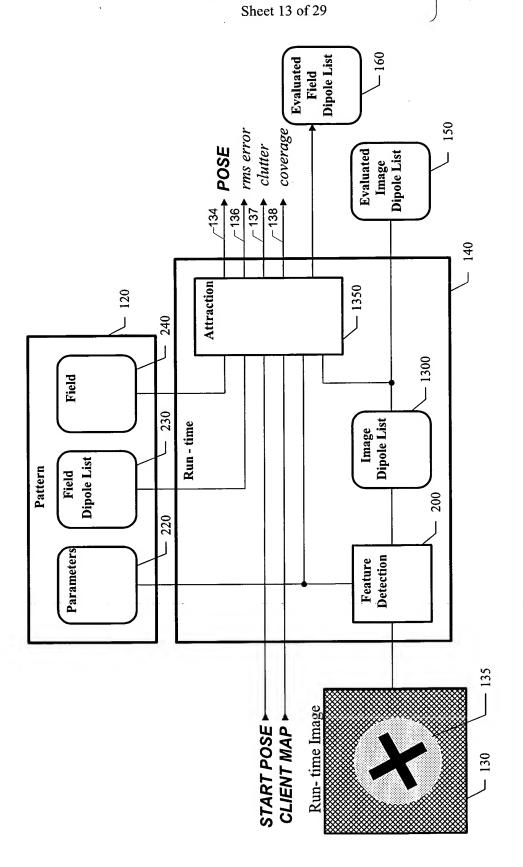


Figure 13

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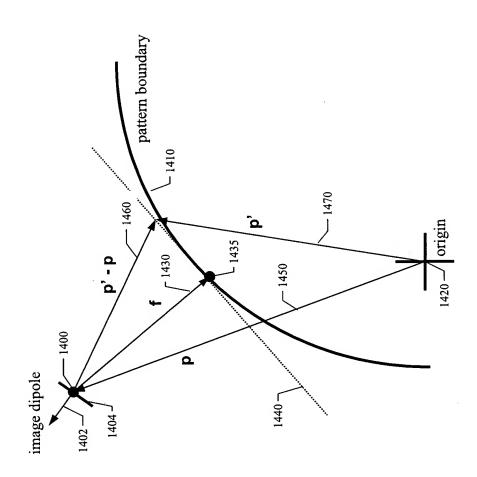
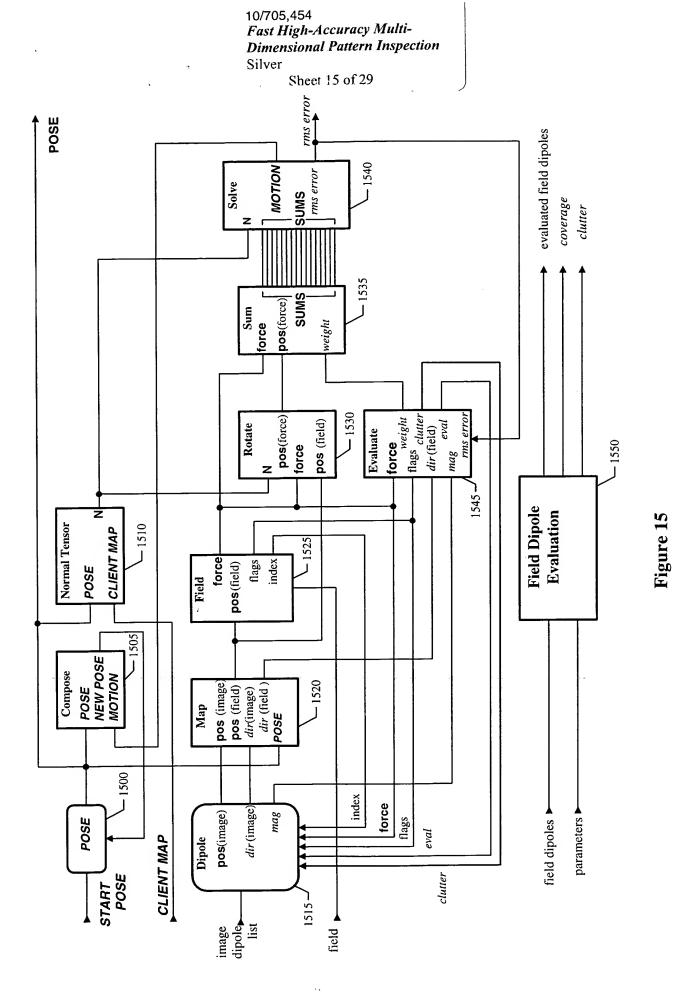


Figure 14



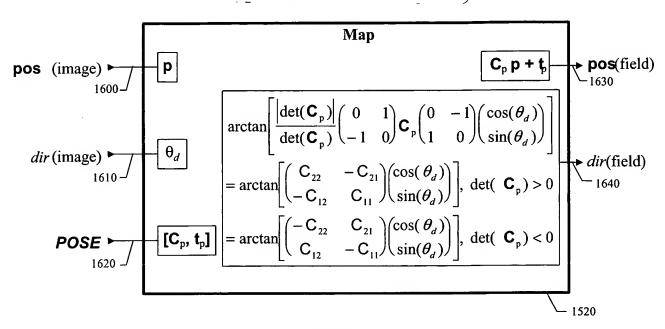
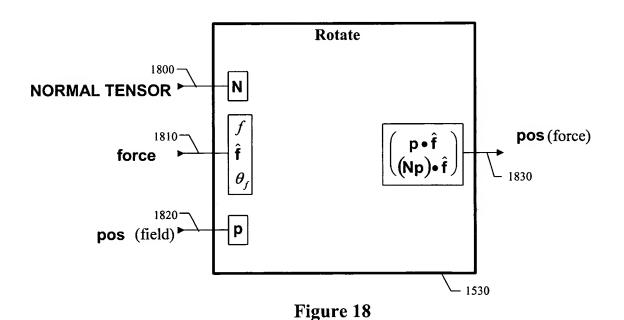


Figure 16



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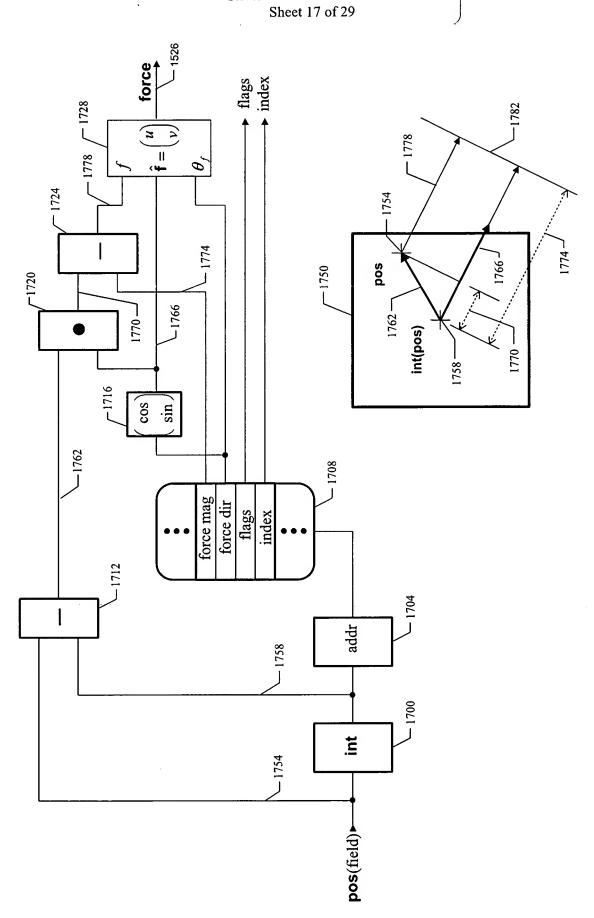


Figure 17

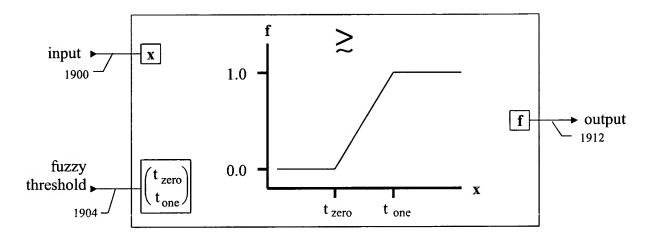


Figure 19a

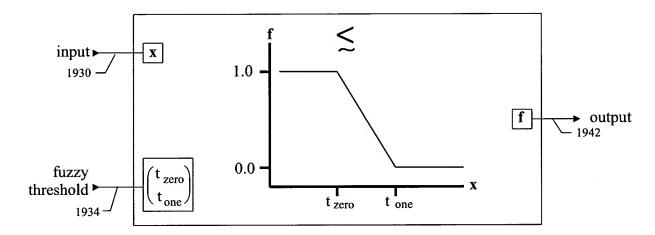


Figure 19b

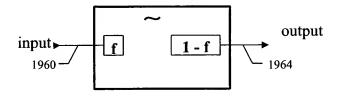
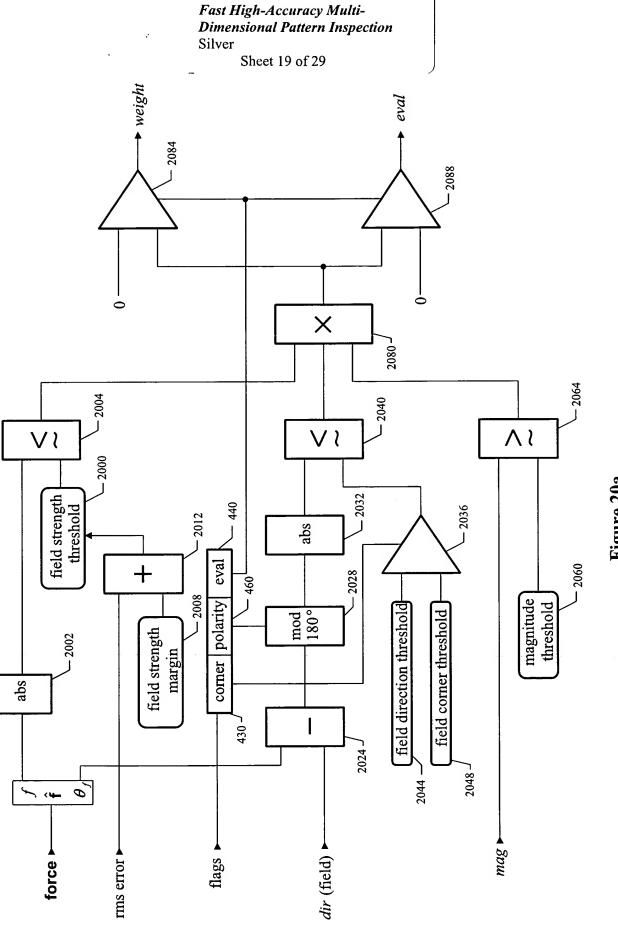


Figure 19c



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Figure 20a

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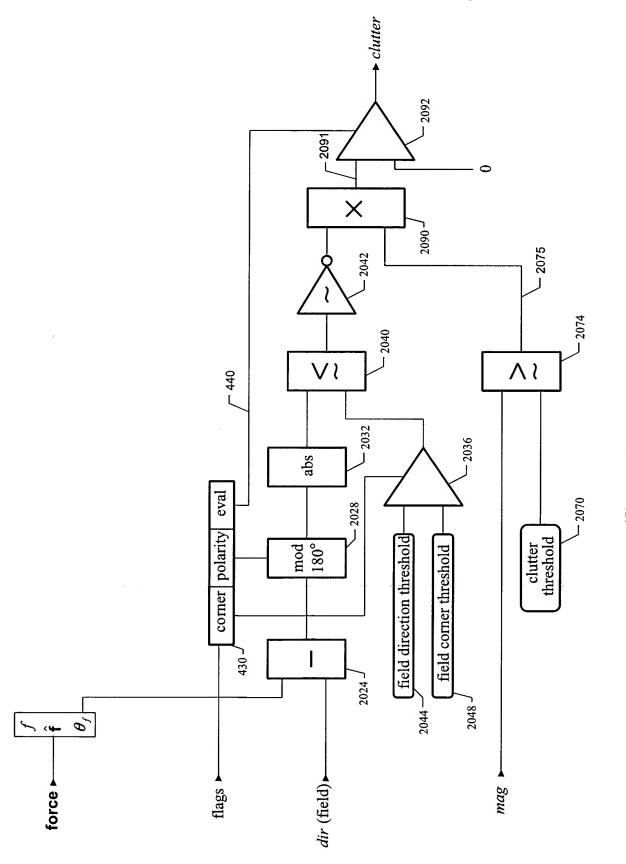


Figure 20b

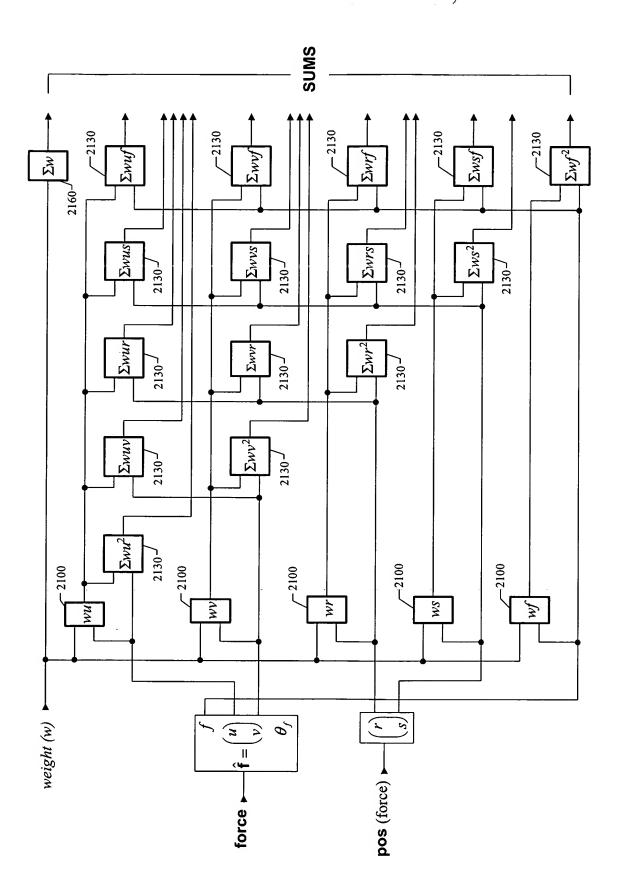


Figure 21

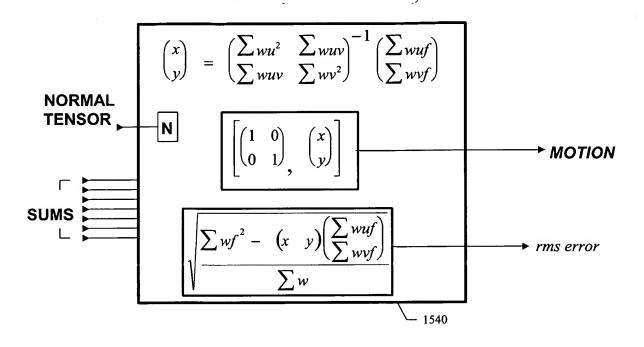


Figure 22a

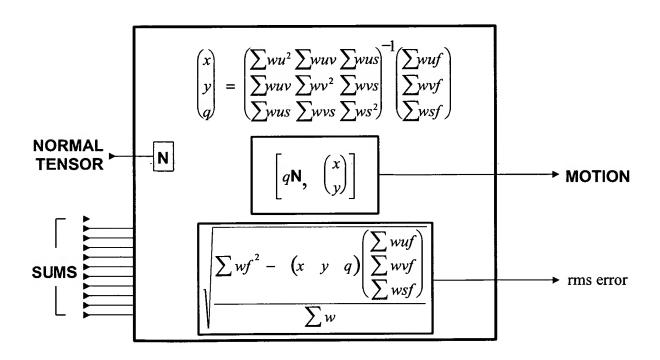


Figure 22b

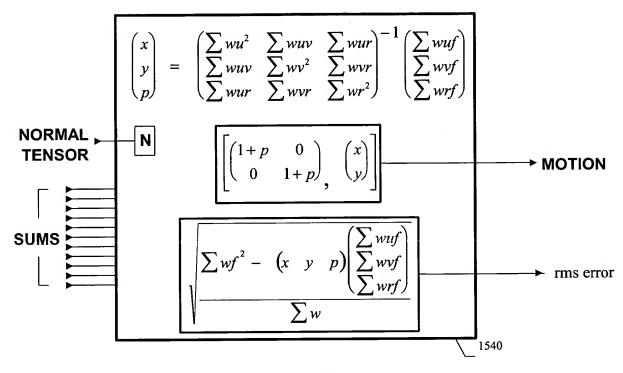


Figure 22c

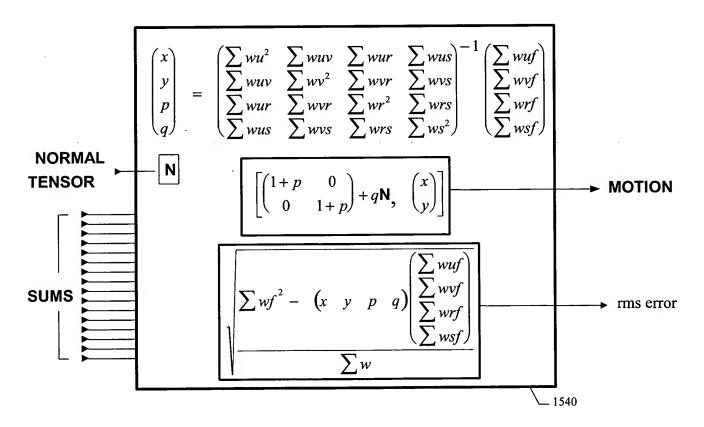


Figure 22d

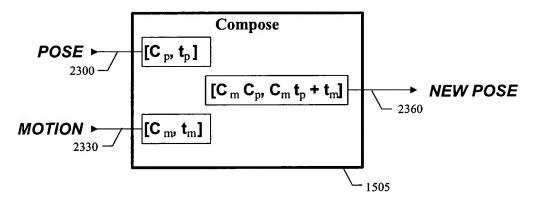


Figure 23

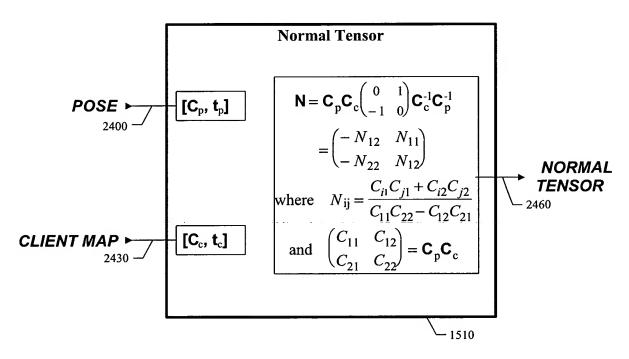


Figure 24

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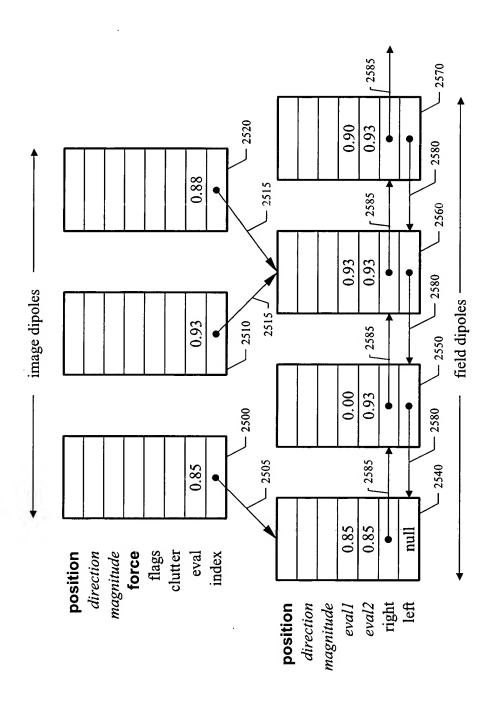


Figure 25

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Fast High-Accuracy MultiDimensional Pattern Inspection
Silver

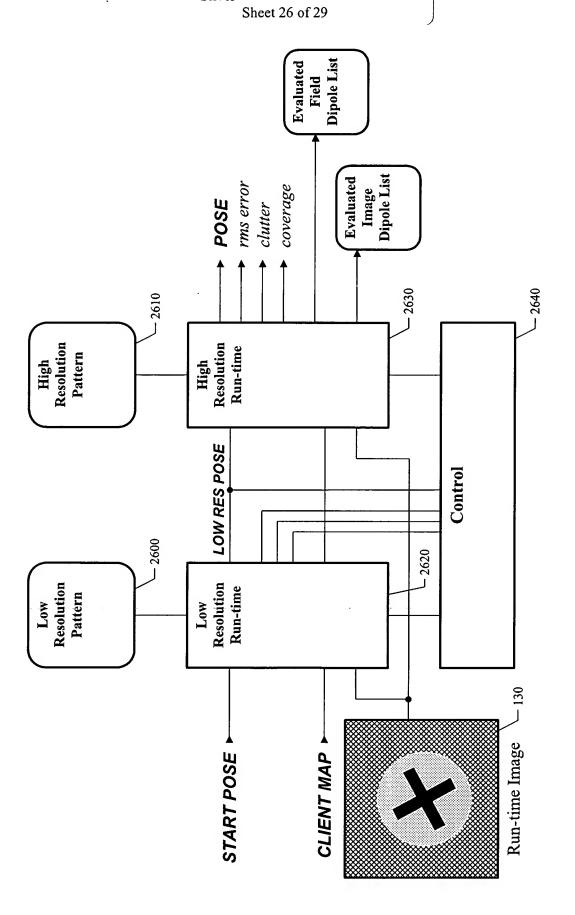


Figure 26

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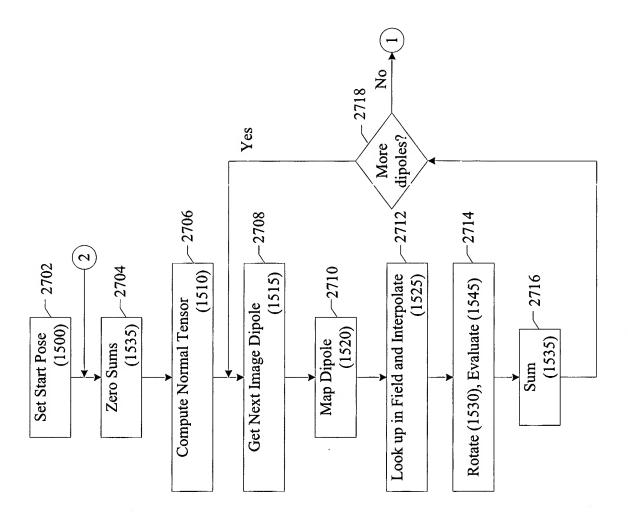


Figure 27a

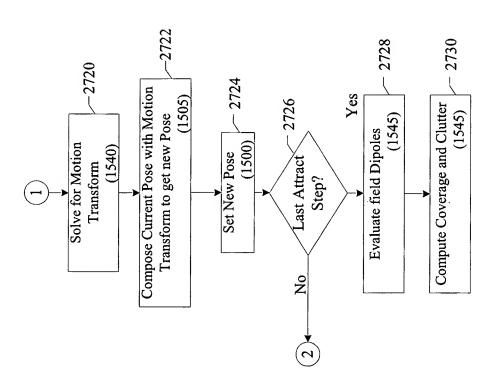


Figure 27b

Run Low Resolution

Result OK?

No
Quit
Yes

Yes

Run High Resolution

Result OK?

No
Change to Low
Resolution, Warn User
Possibly out of focus

Return Results

-2806

-2808

Change to Low
Resolution out of focus

-2810

Figure 28